# Performance Data Sheet

## AE2410Z-FZ1A

## General Information

| | | | |
|---|---|---|---|
| **Model** | AE2410Z-FZ1A | **Refrigerant** | R-404A |
| **Test Condition** | EN12900 ASERCOM | **Performance Test Voltage** | 220V ~ 50HZ |
| **Return Gas** | 20°C (68°F) RETURN GAS | **Motor Type** | CSIR |

## Performance Information

| Evap Temp (°C) | | Condensing Temperature (°C) | | | |
|---|---|---|---|---|---|
| | | 30 | 40 | 50 | 60 |
| -40 | Btu/h | 391 | 300 | 196 | 58.7 |
| | Watts (Power) | 143 | 141 | 136 | 118 |
| | Amps | 1.40 | 1.40 | 1.38 | 1.33 |
| | Lb/h | 6.02 | 5.24 | 4.00 | 1.76 |
| -35 | Btu/h | 538 | 435 | 323 | 181 |
| | Watts (Power) | 157 | 159 | 158 | 146 |
| | Amps | 1.43 | 1.43 | 1.43 | 1.39 |
| | Lb/h | 8.39 | 7.63 | 6.50 | 4.48 |
| -30 | Btu/h | 718 | 593 | 463 | 307 |
| | Watts (Power) | 173 | 178 | 181 | 174 |
| | Amps | 1.46 | 1.47 | 1.47 | 1.45 |
| | Lb/h | 11.2 | 10.4 | 9.35 | 7.46 |
| -25 | Btu/h | 936 | 780 | 622 | 443 |
| | Watts (Power) | 188 | 197 | 205 | 202 |
| | Amps | 1.49 | 1.51 | 1.53 | 1.52 |
| | Lb/h | 14.7 | 13.8 | 12.7 | 10.9 |
| -23.3 | Btu/h | 1020 | 851 | 682 | 493 |
| | Watts (Power) | 194 | 204 | 213 | 212 |
| | Amps | 1.51 | 1.53 | 1.55 | 1.55 |
| | Lb/h | 16.1 | 15.1 | 13.9 | 12.1 |
| -20 | Btu/h | 1200 | 1000 | 808 | 595 |
| | Watts (Power) | 204 | 217 | 228 | 231 |
| | Amps | 1.53 | 1.56 | 1.59 | 1.60 |
| | Lb/h | 19.0 | 17.8 | 16.6 | 14.8 |
| -15 | Btu/h | 1510 | 1270 | 1020 | 770 |
| | Watts (Power) | 219 | 235 | 252 | 260 |
| | Amps | 1.57 | 1.62 | 1.66 | 1.69 |
| | Lb/h | 24.1 | 22.7 | 21.3 | 19.4 |
| -10 | Btu/h | 1880 | 1580 | 1280 | 973 |
| | Watts (Power) | 233 | 253 | 274 | 288 |
| | Amps | 1.62 | 1.67 | 1.74 | 1.79 |
| | Lb/h | 30.3 | 28.6 | 26.9 | 24.8 |

| COEFFICIENTS | CAPACITY | POWER | CURRENT | MASS FLOW |
|---|---|---|---|---|
| C1 | 4.483713E+03 | 2.677055E+02 | 1.766558E+00 | 6.118307E+01 |
| C2 | 1.622070E+02 | 5.675897E-01 | 5.346065E-03 | 2.294723E+00 |
| C3 | -6.722196E+01 | -4.315189E+00 | -1.307969E-02 | -7.784404E-01 |
| C4 | 2.060633E+00 | -5.158706E-02 | -2.734799E-05 | 3.316638E-02 |
| C5 | -1.940563E+00 | 2.098353E-02 | 6.967884E-05 | -1.698681E-02 |
| C6 | 4.870946E-01 | 1.714826E-01 | 4.902844E-04 | 1.204062E-02 |
| C7 | 7.988749E-03 | -6.155174E-04 | -1.516796E-07 | 1.805237E-04 |
| C8 | -1.896119E-02 | 1.337206E-04 | 3.083086E-06 | -1.460564E-04 |
| C9 | 3.908823E-03 | 8.137460E-04 | 3.838685E-06 | 9.303965E-05 |
| C10 | -3.318915E-03 | -1.329473E-03 | -3.434866E-06 | -8.859041E-05 |

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature

# Performance Data Sheet

## AE2410Z-FZ1A

## General Information

| | | | |
|---|---|---|---|
| **Model** | AE2410Z-FZ1A | **Refrigerant** | R-404A |
| **Test Condition** | EN12900 ASERCOM | **Performance Test Voltage** | 220V ~ 50HZ |
| **Return Gas** | 20°C (68°F) RETURN GAS | **Motor Type** | CSIR |

## Performance Information

| Evap Temp (°F) | | Condensing Temperature (°F) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | **80** | **90** | **100** | **110** | **120** | **130** | **140** |
| **-40** | Btu/h | 422 | 371 | 321 | 268 | 209 | 140 | 58.7 |
| | Watts | 144 | 142 | 142 | 140 | 137 | 130 | 118 |
| | Amps | 1.40 | 1.40 | 1.40 | 1.40 | 1.39 | 1.37 | 1.33 |
| | Lb/h | 6.27 | 5.86 | 5.44 | 4.90 | 4.18 | 3.16 | 1.76 |
| **-35** | Btu/h | 502 | 448 | 394 | 339 | 278 | 208 | 126 |
| | Watts | 151 | 151 | 151 | 151 | 149 | 143 | 133 |
| | Amps | 1.42 | 1.42 | 1.42 | 1.42 | 1.41 | 1.39 | 1.36 |
| | Lb/h | 7.54 | 7.12 | 6.71 | 6.21 | 5.52 | 4.56 | 3.24 |
| **-30** | Btu/h | 593 | 533 | 475 | 415 | 351 | 279 | 194 |
| | Watts | 159 | 159 | 161 | 162 | 161 | 157 | 149 |
| | Amps | 1.43 | 1.43 | 1.44 | 1.44 | 1.43 | 1.42 | 1.39 |
| | Lb/h | 8.94 | 8.51 | 8.10 | 7.61 | 6.96 | 6.05 | 4.79 |
| **-25** | Btu/h | 694 | 627 | 563 | 498 | 429 | 352 | 264 |
| | Watts | 167 | 168 | 171 | 173 | 174 | 171 | 164 |
| | Amps | 1.45 | 1.45 | 1.46 | 1.46 | 1.46 | 1.45 | 1.43 |
| | Lb/h | 10.5 | 10.1 | 9.63 | 9.14 | 8.51 | 7.63 | 6.43 |
| **-20** | Btu/h | 808 | 733 | 660 | 588 | 512 | 429 | 336 |
| | Watts | 175 | 177 | 181 | 184 | 186 | 185 | 180 |
| | Amps | 1.46 | 1.47 | 1.48 | 1.48 | 1.49 | 1.48 | 1.47 |
| | Lb/h | 12.3 | 11.8 | 11.3 | 10.8 | 10.2 | 9.34 | 8.18 |
| **-15** | Btu/h | 936 | 850 | 768 | 687 | 602 | 512 | 411 |
| | Watts | 183 | 186 | 191 | 196 | 199 | 200 | 196 |
| | Amps | 1.48 | 1.49 | 1.50 | 1.51 | 1.52 | 1.52 | 1.51 |
| | Lb/h | 14.2 | 13.7 | 13.2 | 12.7 | 12.0 | 11.2 | 10.1 |
| **-10** | Btu/h | 1080 | 980 | 886 | 794 | 700 | 600 | 492 |
| | Watts | 191 | 196 | 201 | 207 | 212 | 214 | 212 |
| | Amps | 1.50 | 1.51 | 1.52 | 1.54 | 1.55 | 1.55 | 1.55 |
| | Lb/h | 16.4 | 15.8 | 15.3 | 14.7 | 14.1 | 13.2 | 12.1 |
| **-5** | Btu/h | 1230 | 1120 | 1020 | 913 | 807 | 697 | 577 |
| | Watts | 199 | 205 | 212 | 219 | 225 | 228 | 228 |
| | Amps | 1.52 | 1.53 | 1.55 | 1.57 | 1.58 | 1.59 | 1.59 |
| | Lb/h | 18.9 | 18.2 | 17.6 | 17.0 | 16.3 | 15.5 | 14.3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **0** | Btu/h | 1410 | 1280 | 1160 | 1040 | 924 | 801 | 670 |
| | Watts | 207 | 214 | 222 | 230 | 238 | 243 | 244 |
| | Amps | 1.54 | 1.56 | 1.58 | 1.60 | 1.62 | 1.63 | 1.64 |
| | Lb/h | 21.6 | 20.8 | 20.2 | 19.5 | 18.8 | 17.9 | 16.8 |
| **5** | Btu/h | 1600 | 1460 | 1320 | 1190 | 1050 | 914 | 770 |
| | Watts | 215 | 222 | 232 | 241 | 250 | 257 | 260 |
| | Amps | 1.57 | 1.58 | 1.61 | 1.63 | 1.66 | 1.68 | 1.69 |
| | Lb/h | 24.7 | 23.8 | 23.0 | 22.3 | 21.5 | 20.6 | 19.4 |
| **10** | Btu/h | 1810 | 1650 | 1490 | 1340 | 1190 | 1040 | 879 |
| | Watts | 222 | 231 | 241 | 252 | 262 | 271 | 275 |
| | Amps | 1.59 | 1.61 | 1.64 | 1.67 | 1.70 | 1.72 | 1.74 |
| | Lb/h | 28.0 | 27.0 | 26.2 | 25.3 | 24.5 | 23.5 | 22.3 |

| COEFFICIENTS | CAPACITY | POWER | CURRENT | MASS FLOW |
|---|---|---|---|---|
| C1 | 3.045319E+03 | 3.844590E+02 | 2.053638E+00 | 4.292725E+01 |
| C2 | 6.681307E+01 | 9.927014E-01 | 4.498843E-03 | 8.476156E-01 |
| C3 | -3.150595E+01 | -6.382942E+00 | -1.755927E-02 | -5.421730E-01 |
| C4 | 6.085352E-01 | -6.523678E-03 | -2.286075E-05 | 8.066360E-03 |
| C5 | -4.337555E-01 | -3.921041E-03 | -5.445327E-05 | -4.661040E-03 |
| C6 | 1.835226E-01 | 7.034606E-02 | 1.868006E-04 | 4.664015E-03 |
| C7 | 1.369813E-03 | -1.055414E-04 | -2.600817E-08 | 3.095400E-05 |
| C8 | -3.251233E-03 | 2.292877E-05 | 5.286499E-07 | -2.504397E-05 |
| C9 | 6.702372E-04 | 1.395312E-04 | 6.582108E-07 | 1.595330E-05 |
| C10 | -5.690869E-04 | -2.279618E-04 | -5.889688E-07 | -1.519040E-05 |

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature

# Performance Data Sheet

## AE2410Z-FZ1A

## General Information

| | | | |
|---|---|---|---|
| **Model** | AE2410Z-FZ1A | **Refrigerant** | R-404A |
| **Test Condition** | EN12900 ASERCOM | **Performance Test Voltage** | 240V ~ 50HZ |
| **Return Gas** | 20°C (68°F) RETURN GAS | **Motor Type** | CSIR |

## Performance Information

| Evap Temp (°C) | | Condensing Temperature (°C) | | | |
|---|---|---|---|---|---|
| | | 30 | 40 | 50 | 60 |
| -40 | Watts (Capacity) | 115 | 88.1 | 57.5 | 17.2 |
| | Watts (Power) | 143 | 141 | 136 | 117 |
| | Amps | 1.40 | 1.40 | 1.38 | 1.33 |
| | Lb/h | 2.75 | 2.38 | 1.82 | 0.85 |
| -35 | Watts (Capacity) | 158 | 128 | 94.5 | 52.9 |
| | Watts (Power) | 157 | 159 | 158 | 145 |
| | Amps | 1.43 | 1.43 | 1.43 | 1.39 |
| | Lb/h | 3.81 | 3.45 | 2.94 | 2.06 |
| -30 | Watts (Capacity) | 210 | 174 | 136 | 89.9 |
| | Watts (Power) | 173 | 178 | 181 | 173 |
| | Amps | 1.46 | 1.47 | 1.47 | 1.45 |
| | Lb/h | 5.10 | 4.72 | 4.23 | 3.40 |
| -25 | Watts (Capacity) | 274 | 229 | 182 | 130 |
| | Watts (Power) | 188 | 198 | 205 | 202 |
| | Amps | 1.49 | 1.51 | 1.53 | 1.52 |
| | Lb/h | 6.68 | 6.25 | 5.74 | 4.93 |
| -23.3 | Watts (Capacity) | 299 | 249 | 200 | 144 |
| | Watts (Power) | 194 | 204 | 213 | 212 |
| | Amps | 1.51 | 1.53 | 1.55 | 1.55 |
| | Lb/h | 7.29 | 6.83 | 6.31 | 5.50 |
| -20 | Watts (Capacity) | 351 | 294 | 237 | 175 |
| | Watts (Power) | 204 | 217 | 229 | 231 |
| | Amps | 1.53 | 1.56 | 1.59 | 1.60 |
| | Lb/h | 8.61 | 8.09 | 7.52 | 6.70 |
| -15 | Watts (Capacity) | 443 | 371 | 300 | 226 |
| | Watts (Power) | 219 | 236 | 252 | 260 |

| | | | | | |
|---|---|---|---|---|---|
| | Amps | 1.57 | 1.62 | 1.66 | 1.69 |
| | Lb/h | 10.9 | 10.3 | 9.65 | 8.78 |
| **-10** | Watts (Capacity) | 552 | 462 | 375 | 285 |
| | Watts (Power) | 233 | 253 | 274 | 287 |
| | Amps | 1.62 | 1.67 | 1.74 | 1.79 |
| | Lb/h | 13.7 | 12.9 | 12.2 | 11.2 |

| COEFFICIENTS | CAPACITY | POWER | CURRENT | MASS FLOW |
|---|---|---|---|---|
| C1 | 1.314046E+03 | 2.698692E+02 | 1.766557E+00 | 2.742995E+01 |
| C2 | 4.753819E+01 | 5.023964E-01 | 5.346036E-03 | 1.029955E+00 |
| C3 | -1.970082E+01 | -4.565034E+00 | -1.307963E-02 | -3.312911E-01 |
| C4 | 6.039119E-01 | -5.374575E-02 | -2.734915E-05 | 1.472174E-02 |
| C5 | -5.687229E-01 | 1.984515E-02 | 6.967915E-05 | -7.498801E-03 |
| C6 | 1.427534E-01 | 1.782637E-01 | 4.902834E-04 | 4.910479E-03 |
| C7 | 2.341271E-03 | -6.494456E-04 | -1.516910E-07 | 7.729662E-05 |
| C8 | -5.556977E-03 | 9.789228E-05 | 3.083098E-06 | -6.668663E-05 |
| C9 | 1.145564E-03 | 8.176789E-04 | 3.838688E-06 | 3.873781E-05 |
| C10 | -9.726783E-04 | -1.387814E-03 | -3.434858E-06 | -3.614739E-05 |

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature